

REMARKS

The Office Action of July 27, 2004 has been reviewed and carefully considered. Claims 1-17 remain pending in this application, of which claims 1, 8, and 15 are independent claims. Claims 1, 7, 13-15, and 17 have been amended to further clarify the present invention. Reconsideration of the above-identified application, as amended herein and in view of the following remarks, is respectfully requested.

Claims 1, 13, and 15 are objected to as having insufficient antecedent basis for the limitation “the EML.” In response, the claims have been amended to recite “modulator” instead of “EML.” Claims 7, 14, and 17 are objected to as creating a lack of clarity. In response, claims 7, 14, and 17 are amended, according to the Examiner’s suggestion, to clearly identify the modulator as an “Electro-absorption modulator laser.” No new matter has been added by these amendments. Reconsideration and withdrawal of these objections is respectfully requested.

Claims 1-2, 6, 8-9, 13, and 15-16 stand rejected under 35 § U.S.C. 103(a) as being unpatentable over Maier U.S. Patent No. 6,580,859 (hereinafter “Maier”) in view of Murakami et al. U.S. Patent No. 6,212,540 (hereinafter “Murakami”).

Applicant respectfully disagrees with, and explicitly traverses the examiner’s reasons for rejecting the claims. A claimed invention is prima facie obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings therein. Second, there must be a reasonable expectation of success. And, third, the prior art reference or combined references must teach or suggest **all** the claim limitations. As will

be shown, neither Maier nor Murakami suggest or motivate one to combine their teachings, as suggested by the examiner. Furthermore, even if their teachings were combined, the combined device would not include teach or suggest all the claim limitations recited in the claims.

With regard to claim 1, this claim is directed to an optical transmitter comprising: a modulator...a first lens...a second lens...and an optical band stop filter for removing the D.C. component from the output of the second lens in order to increase an extinction ratio of the optical transmitter. Claims 8 and 15 recite similar feature.

Applicant respectfully submits that Maier nor Murakami do not, either alone or in combination, show or teach that the optical band stop filter removes the D.C. component from the output of the second lens in order to increase an extinction ratio of the optical transmitter, as recited in the amended independent claims 1, 8 and 15.

As indicated in the background of the invention, an optical transmission is optimal when the transmitted optical signals have a negative chirp and a large extinction ratio at the same time.

According to the Office Action, (1) Maier teaches an optical transmitter, but does not teach the use of filter for removing the D.C. component from the output of the second lens; and (2) Murakami teaches the use of filter to remove the D.C. component from the signal for the purpose of removing unwanted frequency components and to convert the signals into control signals (Col. 13, lines 11-32).

The Office Action further indicates that it would have been obvious to one skilled in the art to use the band stop filter as described in Murakami to form an optical transmitter disclosed by Maier.

Applicants have found no indication in Maier or Murakami that even shows recognition of the advantages or the desirability of the limitations recited in claims 1, 8 and 15. In fact, Maier fails to provide any motivation to remove the D.C. component from the output of either lens. Also, as pointed out by the examiner, Murakami only teaches the use of band stop filter to convert signals into control signals and fails to show any teachings of increasing the extinction ratio. Therefore, it would not have been obvious to combine the teachings of Murakami with Maier as there is no suggestion to modify the filter disclosed in Maier with a filter “for removing the D.C. component to increase the extinction ratio.”

Further, Applicants respectfully submit that there would have been no motivation for one of ordinary skill to attempt to such a modification, as indicated in the Office Action, of Maier using Murakami without improper hindsight by "use[ing] the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention," see *In Re Denis Rouffet*, 47 USPQ.2d 1453, 1457-58 (Fed. Cir. 1998), and no motivation has been provided by the Office Action to show reasons that the skilled artisan, confronted with the same problems as the inventor would select the elements from the cited prior art references for combination in the manner claimed, see *Id.*

A review of the other art of record has failed to reveal anything that, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as

references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

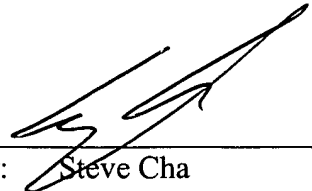
The other claims in this application are each dependent from one or the other of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

Therefore Applicant respectfully requests that the Examiner withdraw the above-stated rejections of the claims. Reconsideration and withdrawal of these grounds of rejection are respectfully submitted.

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

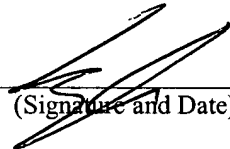
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